

Date: Thursday, 6/14/2007 3:18:11 PM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : X-TUBE MATERIAL
Job Number : 32913	
Estimate Number : 12449	
P.O. Number : <u>N/A</u>	Part Number : D6018125
This Issue : 6/14/2007 S.O. No. : <u>N/A</u>	Drawing Number : D6018 REV A
Prsht Rev. : NC	Project Number : N/A
First Issue : <u>N/A</u> Type : PURCHASED PARTS	Drawing Revision : A
Previous Run : 27472	Material : <u>N/A</u>
Written By : <u>[Signature]</u>	Due Date : 7/17/2007
Checked & Approved By : <u>[Signature]</u>	Qty: 70 Um: Each
Comment : Est Rev. A New Issue 06-06-09 JLM	

Additional Product

Job Number:



Seq. #

Machine Or Operation:

Description :

1.0

PG

PURCHASING



Comment: PURCHASING

Issue P/O: 3986

a) Description: 4130 Seamless Steel Tube

b) 2.299" OD X 2.00" ID X 125" Long

c) Tolerance on all dimensions are as per Dwg D6018

d) Material: AISI 4130 (AMS 6371) Seamless tube

Material certification required

6/20/07/06/15
70

2.0

D6018125P

Crosstube Material



Comment: Qty.: 1.0000 Each(s)/Unit Total: 70.0000 Each(s)

Crosstube Material

3.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material certification is attached

6/27/07/25
70

4.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

6/27/07/12/10
70

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: CNK

6/27/07/12/10
70

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes (No) DQA: Date: 07/12/17
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 6/14/2007 3:18:11 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: X-TUBE MATERIAL

Job Number: 32913

Part Number: D6018125

Job Number:



Seq. #:

Machine Or Operation:

Description:

6.0

QC21

FINAL INSPECTION/W/O RELEASE



70

Comment: FINAL INSPECTION/W/O RELEASE

2007/12/11

Job Completion



2007/12/14 C2

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

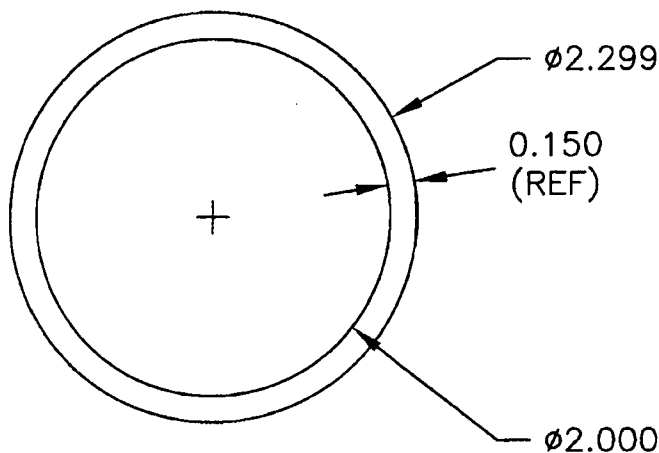
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN QP	DRAWN BY QP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D6018	REV. A SHEET 1 OF 1
DATE 06.06.30		TITLE CROSSTUBE MATERIAL	SCALE 1:1
A	06.06.30	NEW ISSUE	

SPECIFICATION CONTROL DRAWING



NOTES

- 1) D6018-XXX CROSSTUBE
 |
 LENGTH

WHERE XXX IS LENGTH IN INCHES
EG. 125" LONG TUBE: D6018-125

- 2) MATERIAL: AISI 4130 (AMS 6371) SEAMLESS STEEL TUBE
 2.299 OD x 2.000 ID
 ANNEALED
- 3) TOLERANCES ARE PER ASTM A519 AS FOLLOWS:
 O.D.: +0.007/-0.000
 I.D.: +0.000/-0.007
 LENGTH: XXX +0.188/-0.000
 STRAIGHTNESS: 0.010" DEVIATION / 12" LENGTH
- 4) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

WORK ORDER
NO. 32913

RELEASED

06.08.15 #

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UNITED STATES CUSTOMS SERVICE

NORTH AMERICAN FREE TRADE AGREEMENT
CERTIFICATE OF ORIGIN

1. EXPORTER NAME AND ADDRESS FACTORY STEEL & METAL SUPPLY 14020 OAKLAND AVE. DETROIT, MI 48203 TAX ID NUMBER: 38-128-8118	2. BLANKET PERIOD (DD/MM/YY) FROM: 07-20-07 TO: 07-19-08
3. PRODUCER'S NAME AND ADDRESS AVAILABLE UPON REQUEST	4. SOLD TO: DART AEROSPACE 1270 ABERDEEN ST HAWKENSURRY ONTARIO K6A 1K7
TAX IDENTIFICATION NUMBER: [REDACTED]	

5. DESCRIPTION OF GOODS	6. HS TARIFF CLASSIFICATION NUMBER	7. PREFERENCE CRITERION	8. PRODUCER	9. NET COST	10. COUNTRY OF ORIGIN
4130 STEEL TUBES 70 pcs. 2.315 O.D. x 170 W x 115"	7304.51	B	NO	NO	US
70 PCS. 2.315 O.D. x 160 W x 125"	7304.51	B	NO	NO	US


CERTIFY THAT:

THE INFORMATION ON THIS DOCUMENT IS TRUE AND ACCURATE AND I ASSUME THE RESPONSIBILITY FOR PROVIDING SUCH REPRESENTATIONS. UNDERSTANDING THAT I AM LIABLE FOR ANY FALSE STATEMENTS OR MATERIAL OMISSIONS MADE ON OR IN CONNECTION WITH THE DOCUMENT;

AGREE TO MAINTAIN, AND PRESENT UPON REQUEST, DOCUMENTATION NECESSARY TO SUPPORT THIS CERTIFICATE, AND TO INFORM, IN WRITING, ALL PERSONS TO WHOM THE CERTIFICATE WAS GIVEN OF ANY CHANGES THAT COULD AFFECT THE ACCURACY OR VALIDITY OF THIS CERTIFICATE

THE GOODS ORIGINATED IN THE TERRITORY OF ONE OR MORE OF THE PARTIES, AND COMPLY WITH THE ORIGIN REQUIREMENTS SPECIFIED FOR THOSE GOODS IN THE NORTH AMERICAN FREE TRADE AGREEMENT, AND UNLESS SPECIFICALLY EXEMPTED IN ARTICLE 411 OR ANNEX 401, THERE HAS BEEN NO FURTHER PRODUCTION OR ANY OTHER OPERATION OUTSIDE THE TERRITORIES OF THE PARTIES; AND

THIS CERTIFICATE CONSISTS OF 1 PAGES, INCLUDING ALL ATTACHEMENTS.

11a. AUTHORIZED SIGNATURE 	11b. FACTORY STEEL & METAL SUPPLY CO
11c. NAME (PRINT OR TYPE) JOSEPH BRICKER	11d. SALES
11e. DATE: 07/20/2007	11f. TELEPHONE NUMBERS (VOICE) [REDACTED] (FACSIMILE) [REDACTED]

1. VENDOR NAME AND ADDRESS FACTORY STEEL & METAL SUPPLY 14020 OAKLAND AVE. DETROIT, MI 48203		2. DATE OF DIRECT 7/20/2007	
4. CONSIGNEE NAME AND ADDRESS		3. PURCHASE ORDER p-00000-3986	
5. PURCHASER'S NAME AND ADDRESS (IF OTHER THAN CONSIGNEES) DART AEROSPACE 1270 ABERDEEN ST HAWKSBURY ONTARIO K8A 1K7		6. COUNTRY OF TRANSHIPMENT HAWKSBURY	
7. COUNTRY OF ORIGIN UNITED STATES		8. TRANSPORTATION D.P.S.	
9. CONDITIONS OF SALE AND TERMS OF PAYMENT NET 30 DAYS		10. METHOD OF PAYMENT US FUNDS	
11. NUMBER OF PIECES: 140 PCS.		12. SELLING PRICE	
13. QUANTITY		14. UNIT PRICE	15. TOTAL
4130 STEEL TUBES COLD DRAWN SEAMLESS 2.339 O.D. x 170 Wall x 115" 2.299 O.D. x 180 W x 125" BOXING CHARGE		70 pcs. 10.00 ft 9.10 ft	6708.33 6635.42 920.00
16. IF ANY OF FIELDS 1 TO 8 ARE INCLUDED ON AN ATTACHED INVOICE, PLACE AN "X" IN THIS BOX: INVOICE NUMBER		17. TARIFF NUMBER 7304.51 \$ 14,263.75	
19. EXPORTER NAME AND ADDRESS IF OTHER THAN VENDOR		20. ORIGINATOR (NAME AND ADDRESS) JOSEPH BRICKER 14020 OAKLAND AVE DETROIT MI 48203	
21. REVENUE CANADA RULING IF APPLICABLE		22. IF FIELDS 23 AND 24 ARE NOT APPLICABLE, PLACE AN "X" IN THIS BOX:	
23. IF INCLUDED IN FIELD 18, INDICATE AMOUNT A. TRANSPORTATION CHARGES, EXPENSES AND INSURANCE FROM THE PLACE OF DIRECT SHIPMENT TO CANADA B. COSTS FOR CONSTRUCTION, ERECTION AND ASSEMBLY INCURRED AFTER IMPORTATION TO CANADA C. EXPORT PACKAGING		24. IF INCLUDED IN FIELD 18, INDICATE AMOUNT A. TRANSPORTATION CHARGES, EXPENSES AND INSURANCE FROM THE PLACE OF DIRECT SHIPMENT TO CANADA B. COSTS FOR CONSTRUCTION, ERECTION AND ASSEMBLY INCURRED AFTER IMPORTATION TO CANADA C. EXPORT PACKAGING	

PACKING LIST

No. 608

PG 1 OF 1

PL

FACTORY STEEL & METAL SUPPLY 14020 OAKLAND AVENUE DETROIT, MI 48203 (313)883-6300 PHONE (313)883-4883 FAX	CUST ID DA3336		BUYER CL. CLAVOIE Tel (613) 632-3336 Fax (613) 632-4443	SHIP DATE 07/20/2007
	JOB NAME			SHIP VIA TST OVERLAND
SOLD TO DART AEROSPACE 1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7	SALES ORDER # 452	ORDER DATE 07/20/2007	SALES REP JOE BRICKER	RESALE # 59-2958719
	SHIP TO DART AEROSPACE 1270 ABERDEEN STREET HAWKESBURY, ON K6A 1K7		PURCHASE ORDER # P000003986	FOB: DETROIT
			SHIP INST	
			TERMS NET 30 DAYS	

LINE	PCS	QUANTITY	DESCRIPTION	WIDTH	LENGTH	WEIGHT	UNIT PRICE	TOTAL
1	70		RD-N.2339170 4130N CD SMLSS RD TUBE 2.339" OD X .170W (2.00ID) Our Tag # Heat # Pcs Total Ft 15065 70 670.833		115.000"	2,643.082		
2	70		RD-N.2299160 4130N CD SMLSS RD TUBE 2.299" OD X .160W (2.00 ID) Our Tag # Heat # Pcs Total Ft 15066 70 729.167		125.000"	2,668.751		
3	1		PACK BOXING CHARGES MTRS (CIRCLE) FAX SHIPMENT INVOICE ALL DATE: 7/20/07 INITIAL: <i>[Signature]</i>					

[Handwritten Signature]
07/07/25

TOTAL WT 5,311 LBS		TOTAL	
RECEIVED BY - SIGNATURE	RECEIVED BY - PRINTED NAME	DATE RECEIVED	

50



MICHIGAN
seamless tube

TEST REPORT

SHIPM

001

6476

MICHIGAN SEAMLESS TUBE

SOUTH LYON, MICHIGAN 48178

ORDER NUMBER	CUSTOMER ORDER NUMBER	DATE	OFC	COM	DIWI	NET SLS	GR SLS	ACCOUNT NUMBER	US	
029240	061907JOE	06/20/07	22	00	16	16	01	02598001FCO		1DR

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FACTORY STEEL & METAL SUPPLY
14020 OAKLAND

MI 48203

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14020 OAKLAND AVENUE TR
DETROIT INV
MI 48203

ROUTING

OPEN TOP/FULLY TARPED/FOB SOUTH LYON MI

PPD TRUCK

ANALYSIS	SHAPE	PRODUCT	FC	ANNEAL	REQUESTED
4130	ROUND	COLD DRAWN		PER SPEC	07/13/07
SPECIFICATION		CMST	DESCRIPTION		PROMISE
SEAMLESS		AMS6371/A519	CD ALLOY AIRCRAFT		07/13/07

SPECIAL INSTRUCTIONS

80M PSI MIN YIELD, AIM 90 PSI, CERT TO A519-96, MILT-6736BN NOTE-2
AMS-6360L W/DECARB LEVELS TO AMS-6371J, AMS-T-6736AN, 4130H & AMS-
2301J. PRODUCE FROM 1-HEAT. MARK TO INCL GRADE, A519-96, MILT-6736BN
NOTE-2, AMS-T6736AN, AMS-6371J, AMS6360L & 4130H. MAT'L TO BE BOXED
OIL_OD SURFACE CRITICAL. CIRCUMFERENTIAL GRIND MARKS UNACCEPTABLE

ITEM	QUANTITY	O.D.	I.D.	WALL	LENGTH	WT/FT	WEIGHT	
		2.339	2.000			3.938		08:57:2 07/11/0

ITM BALE --BALE--

NUM	BALE NUM	PCS	FTG	HEAT NO.
1	1 2	40	383	00A053546
1	2 2	30	287	00A053546

ITM	PART	STATUS	NUMBER
CUT	9' 7.000"	COM	
CUT	9' 7.000"	COM	

00A053546	.280	.470	.014	.018	.240	.090	.880	.160	.240	.026	EF SDI USA
00A053546	122,831	109,399	18.8	BHN 241-248					OK		
					BEND	FLATTEN	FLARE	REV. FLATTEN	FLANG		

DECARB OK GRAIN SIZE 7

FREQ 0.02 SEV 0.03

MACROS S1, R1, C2

J1 J2 J3 J4 J5 J6 J7 J8 J9 J10

49 49 46 40 34 30 28 27 26 25

MELTED & MANUFACTURED IN USA

We hereby certify that the reported data a
correct according to Michigan Seamless Tut
tests and those of its suppliers.

8.2P8.F9 F



MICHIGAN
seamless tube

TEST REPORT

SHIPM

6475

MICHIGAN SEAMLESS TUBE

SOUTH LYON, MICHIGAN 48178

001

ORDER NUMBER	CUSTOMER ORDER NUMBER	DATE	OFC	COM	DIWI	NET SLS	GR SLS	ACCOUNT NUMBER	US	
029241	061907JOE	06/20/07	22	00	16	16	01	02598001FCO		10R

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FACTORY STEEL & METAL SUPPLY
14020 OAKLAND
DETROIT MI 48203

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FACTORY STEEL & METAL SUPPLY SN
14020 OAKLAND AVENUE TR
DETROIT MI 48203 INV

ROUTING

OPEN TOP/FULLY TARPED/FOB SOUTH LYON MI

PPD TRUCK

ANALYSIS	SHAPE	PRODUCT	FC	ANNEAL	REQUESTED
4130	ROUND	COLD DRAWN		PER SPEC	07/13/07
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2301J. PRODUCE FROM 1-HEAT. MARK TO INCL GRADE, A519-96, MILT-6736BN
NOTE-2, AMS-T6736AN, AMS-6371J, AMS6360L & 4130H. MAT'L TO BE BOXED
OIL OD SURFACE CRITICAL. CIRCUMFERENTIAL GRIND MARKS UNACCEPTABLE

ITEM	QUANTITY	O.D.	I.D.	WALL	LENGTH	WT/FT	WEIGHT	
		2.299	2.000			3.443		11:29:00 07/13/07

ITM BALE --BALE--

NUM NUM PCS FTG HEAT NO.

1 1 2 70 729 0000T2753

ITM PART
STATUS NUMBER
CUT 10' 5.000" COM

HEAT NO.	C	Mn	P	S	Si	Ni	Cr	Mo	Cu	Al	REMARKS
0000T2753	.310	.580	.009	.020	.240	.110	1.020	.150	.200	.030	EF TIMKEN USA
HEAT NO.	ULT. STR. PSI	YIELD, PSI	% ELONG 2"	HARDNESS	HYDRO TEST PSI	ULTRA SONIC %	EDDY CURRENT	EXPANS			
0000T2753	112,010	90,659	25.0	BHN 229-235			OK				
					BEND	FLATTEN	FLARE	REV. FLATTEN	FLANG		

DECARB OK GRAIN SIZE 7

FREQ 0.00 SEV 0.0

MACROS S1, R1, C2

J1 J2 J3 J4 J5 J6 J7 J8 J9 J10

53 52 51 50 45 42 39 36 34 33

MELTED & MANUFACTURED IN USA

[Signature]

We hereby certify that the reported data are correct according to Michigan Seamless Tube tests and those of its suppliers.